

NOTICE OF AVAILABILITY

Coeur d'Alene Basin Proposed Plan

Proposed Plan Available for Public Review on October 29

The Proposed Plan for cleanup of mine waste contamination in the Coeur d'Alene River Basin will be available for public review and comment on October 29, 2001. This notice summarizes the specific interim action proposed for the first increment of clean up work in the Basin. The entire Coeur d'Alene Basin Proposed Plan is not summarized in this notice. **Please refer to the Proposed Plan for a complete summary of all of the cleanup alternatives that were evaluated and for a detailed description of the interim action.**

Proposed Plan Public Meetings

November 13th (Tuesday)

Wallace High School

Miners Auditorium
401 River Street
Wallace, Idaho

November 14th (Wednesday)

Canyon Elementary School

E. 27405 Schoolhouse Loop
(1.5 miles east of the Rose Lake exit off I-90)
Cataldo, Idaho

November 15th (Thursday)

Coeur d'Alene Inn

414 W. Appleway
Coeur d'Alene, Idaho

November 19th (Monday)

Spokane Public Works Building

(in the Commissioners Hearing Room)
1026 W. Broadway (next to the Spokane County Courthouse)
Spokane, WA

The meetings will begin at 6:00 pm with availability sessions. Presentations will start at 6:30 pm. People wishing to provide oral comments will be called upon in the order in which they sign in.

Highlights

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The Proposed Plan describes the U.S. Environmental Protection Agency's (EPA) preferred course of action for addressing certain on-going human health and environmental risks posed by historical mining contamination in the Basin. The Plan includes proposed actions for areas throughout the Basin – from Mullan, Idaho to Spokane, Washington. The Plan provides a formal opportunity for the public to comment on EPA's cleanup plans for the Basin. After reviewing and responding to comments on the Proposed Plan, EPA plans to issue its final decision in early 2002 in the Record of Decision (ROD).

EPA is accepting written comments on the Proposed Plan for 30 days, from October 29, 2001 through November 28, 2001. ~~EPA will extend the comment period an additional 30 days upon request. If the comment period is extended, comments will be accepted through December 28, 2001. EPA will publish a notification if the comment period is extended.~~ In addition, you may provide oral or written comments on the Proposed Plan at the four public meetings.

NOTE: The comment period was extended until February 26, 2002.

Where to Review the Proposed Plan

You can review the Proposed Plan and supporting documents at the following information repositories and on EPA's website:

Wallace Public Library

415 River Street, Wallace, ID 83873
208-752-4571
Contact: Ms. Bernie Ludwick

North Idaho College Library

(Contains the entire Administrative Record)
1000 Garden Avenue, Coeur d'Alene, ID 83814
208-769-3355
Contact: Ms. Ann Johnston

Harrison City Hall

P.O. Box 73, Harrison, ID 83833
208-689-3212
Contact: Ms. Sheila Gustin

Spokane Public Library

906 West Main Avenue, Spokane, WA 99201
509-626-5336
Contact: Ms. Dana Dalrymple

Coeur d'Alene Field Office

1910 Northwest Boulevard, Suite 208, Coeur d'Alene, ID 83814
208-664-4588
Contact: Dick Martindale

EPA Seattle Office

(Contains the entire Administrative Record)
1200 6th Avenue
Seattle, WA 98101
206-553-4494
Contact: Superfund Records Center

EPA's Website:

<http://yosemite.epa.gov/r10/cleanup.nsf/sites/cda>

Where to Send Comments

Written comments on the Proposed Plan should be directed to:

Sheila Eckman, Coeur d'Alene Team Leader
U.S. Environmental Protection Agency
1200 6th Avenue, MS ECL-113
Seattle, WA 98101
Telephone: 206-553-0455 or 1-800-424-4372
E-mail: Eckman.Sheila@EPA.gov

The Challenge: Developing a Comprehensive Cleanup Plan for the Basin

The Coeur d'Alene Basin is a large and diverse geographic area. Given the size and complexity of the Basin and the amount of historical mine waste present, it is clear that the cleanup will take many years. However, with the completion of the Risk Assessments, Remedial Investigation and Feasibility Study, we know more about the amount and types of contamination present and how it is moving through the Coeur d'Alene Basin. This information allows us to better prioritize cleanup actions, to understand how cleanup work in one area of the Basin may affect other areas, and to determine which actions will be most effective.



A Collaborative Effort

The Proposed Plan is the result of a collaborative process among EPA, governments with jurisdiction in the Basin, and the public. The needs and concerns of these interests vary widely and sometimes conflict. The Proposed Plan must meet applicable laws and regulations, while also attempting to address the concerns of the governmental agencies and the affected communities. EPA has attempted to strike a balance among these varied interests and propose a reasonable and scientifically sound approach to cleanup in the Basin.

Who Helped Develop the Proposed Plan

The State of Idaho, State of Washington, Coeur d'Alene Tribe, Spokane Tribe, Basin Cities/Counties, Health Districts, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service, U.S. Geological Survey

Basin Cleanup: An Incremental Approach is Proposed

Given the scope of cleanup efforts that will be required, EPA is proposing an incremental approach to cleanup in the Basin. The Proposed Plan, which represents the first increment of work, focuses on actions that will have tangible and measurable human and environmental benefits over the next 20 to 30 years. The plan also describes, in general, the types of work that would be needed to meet the federal and state ambient water quality standards. Meeting these standards is expected to take many decades.

While it will take many decades to meet some ecological standards, the final cleanup actions needed to protect human health in the communities and residential areas are targeted for completion in the first five years. Although significant cleanup actions to protect the environment are included in the interim action, EPA believes that additional cleanup actions will be needed to meet long-term comprehensive environmental goals. These actions will be identified in future decision documents.

The Bunker Hill Mining Complex, which is known as the "Bunker Hill Box," is already the subject of two Records of Decision. Therefore, the

Proposed Plan does not include cleanup actions for that area. EPA does, however, anticipate more cleanup work in the Bunker Hill Box to reduce the amount of metals getting into the river.

A key component of the incremental approach to cleanup of the Basin will be a monitoring program. Periodic monitoring of the river system and Basin will provide data to help evaluate cleanup efforts and to make adjustments and modifications where needed. It also helps in evaluating the possibility of using new cleanup technologies as they become available.

Cleanup Goals

Protecting Human Health

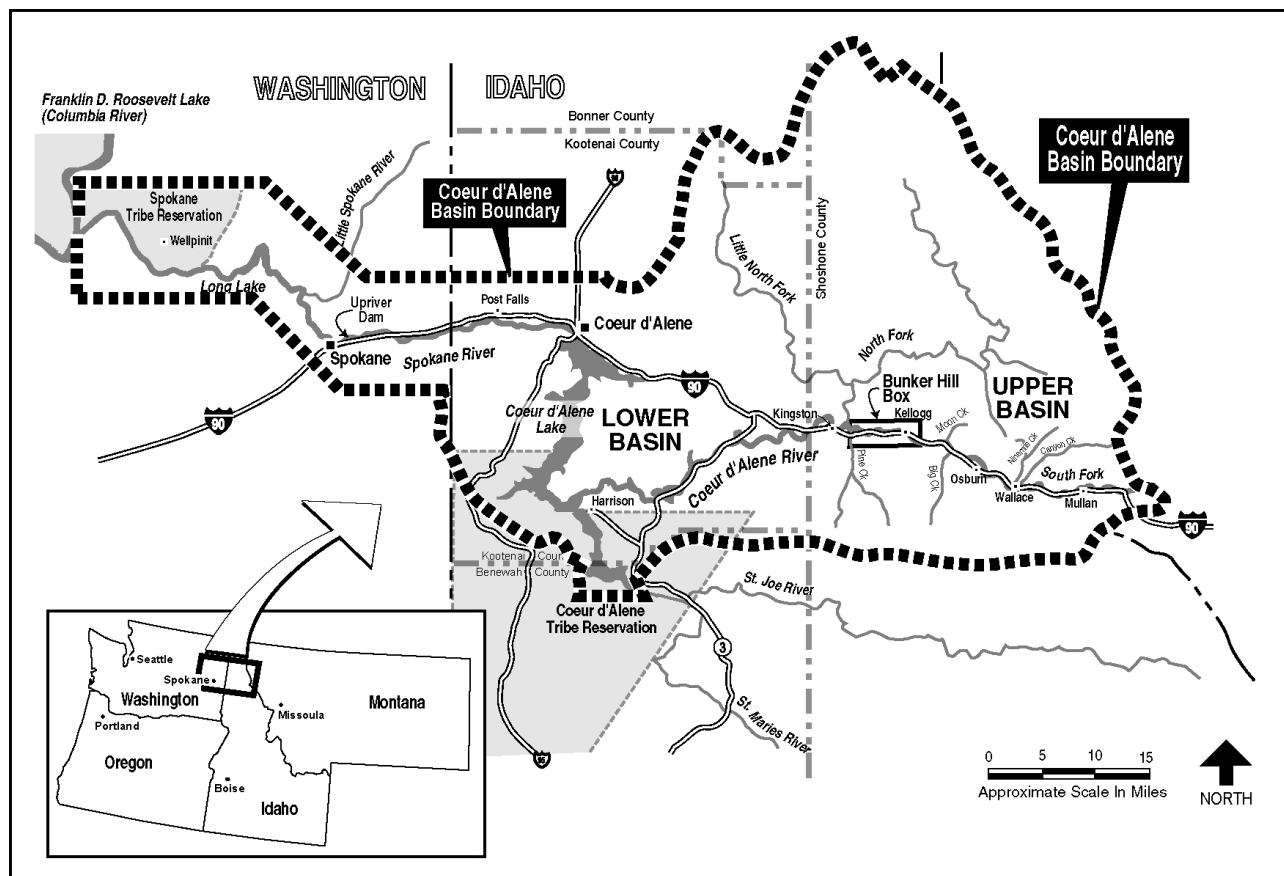
A primary goal for cleanup in the Basin is to prevent people (especially children and pregnant women) from coming into contact with unhealthy levels of mine waste contamination. The national goal for lead-contaminated sites is to ensure that every child has a less than five percent chance of having a blood-lead level above the Center for Disease Control guideline of 10 micrograms per deciliter. Cleanup actions in residential and commercial areas would start soon after the Record of Decision is issued and would be targeted for completion in approximately five years.

Protecting the Environment

The ecological goals for the interim action are:

1. Establishing sustainable fisheries in selected areas by:
 - ☐ Reducing metals concentrations in surface water to levels that improve the health of the fish population;
 - ☐ Treating water at the mouth of a stream in highly contaminated watersheds where long-term cleanup of the entire stream will be extensive, expensive and difficult; and
 - ☐ Providing a variety of fish habitats (e.g., adult fisheries and spawning areas) that are connected by migratory corridors so fish can move between cleaner areas.

2. Protecting waterfowl and other wildlife from lead in high priority wetlands, lakes and floodplains by:
 - ☐ Cleaning up waterfowl feeding areas to reduce waterfowl mortalities;
 - ☐ Focusing the first cleanup activities in wetlands that have high levels of contamination and low potential to be recontaminated during future floods; and
 - ☐ Combining wetland cleanup with other opportunities such as working with interested agricultural landowners with lands that have lower levels of contamination that could provide additional safe waterfowl feeding areas.
3. Reducing the potential for downstream recontamination and reducing discharges of lead to Coeur d'Alene Lake and the Spokane River by:
 - ☐ Stabilizing stream banks and mine dumps in areas of highest erosion potential to reduce the movement of contaminants from the river banks into the river and to reduce toxicity to birds and animals living in the bank areas; and
 - ☐ Removing sediment from selected riverbed depositional and floodplain areas. These removals would be of limited extent initially and would be used to help identify the most cost-effective approach for future removals.

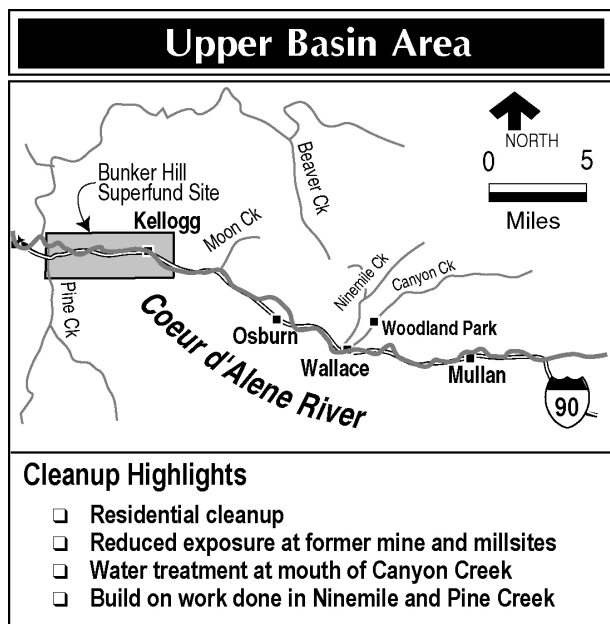


How Much Will the Interim Action Cost?

Human Health (incl. 31 Recreational Areas):	\$92M
Upper Basin (environmental protection):	\$100M
Beds and Banks (environmental protection):	\$67M
Floodplains (environmental protection):	\$81M
Spokane River (environmental protection):	\$10M
Monitoring (environmental protection):	\$9M
Total Cost of Interim Action:	\$359 M*

*Costs are rounded in millions of dollars

Proposed Cleanup Actions for the Upper Basin (from Mullan west to Kingston)



Residential and Community Areas

Protection of human health in the communities is a primary goal for cleanup work in the Basin. Several types of cleanup actions have been proposed to address human health issues. These actions will focus on reducing lead levels in residential soil and house dust and providing clean drinking water supplies.

The following actions are proposed;

- ☐ Remove and replace residential soils containing more than 1,000 parts per million lead (estimated at approximately 900 residences*);
- ☐ Establish and maintain vegetated barriers over residential soils containing between 700 and 1,000 parts per million lead (estimated at approximately 470 residences*);
- ☐ Measure lead levels in house dust to identify and help families with young children at risk from excessive exposures to lead both in and around the home (voluntary participation) and coordinate with lead abatement programs;
- ☐ Provide safe drinking water to residents with contaminated wells by hookup to a public water system, replacement of the well or treatment at the wellhead or tap; and
- ☐ Managing contaminated soil left in place by ensuring that protective barriers installed remain intact so that people do not come into contact with deeper contaminated soil. This would be done through the use of institutional controls (such as local ordinances and educational programs).

*Sampling of individual residences will be needed to determine the precise number of properties needing cleanup.

Former Mine and Mill Sites

Several areas in the upper Basin have former mine and mill facilities. These facilities are a human health concern where adults and children may come in contact with mining contamination. Actions to reduce exposure to contamination at these facilities include a combination of access controls, decontamination, selective demolition of buildings, capping, and removals of soils, tailings and debris. The facilities for proposed actions include the following:

- ☐ **Upper South Fork Coeur d'Alene River:** Golconda, Morning No. 6, and National Mill;
- ☐ **Ninemile Creek:** Dayrock Mine and Mill;
- ☐ **Canyon Creek:** Standard-Mammoth Mill and Sisters Mine;

- ❑ **Pine Creek:** Upper and Lower Constitution Mine/Mill, Highland Surprise Mine/Mill, Nevada Stewart Mine, Hilarity Mine/Mill; and
- ❑ **South Fork:** Hercules Mill, U.S. Bureau of Mines impoundment, Coeur d'Alene Mill, and Silver Dollar Mine.

Ninemile Creek

Much work has already been done in the East Fork of Ninemile Creek. The proposed work would build on these efforts and improve conditions to re-establish a trout fishery from the East Fork headwaters to above the Success Mine and in a portion of the mainstem. The proposed work will also focus on improving conditions to allow a migratory corridor for adult and juvenile fish in the East Fork above the Success Mine to the confluence with the mainstem. Cleanup along the banks will also be included to improve conditions for fish and wildlife in these areas. The work in Ninemile Creek and lessons learned would serve as a model for how to cleanup other streams. Some of the major interim actions include but are not limited to the following:

- ❑ Complete the cleanup at the Success Mine;
- ❑ Remove, contain or treat significant sources of metals in the East Fork (upstream of the Success Mine); and
- ❑ Treat the water discharging from the Interstate seep area.

Canyon Creek

Canyon Creek is a large source of metals to the Coeur d'Alene River system. The contamination in the canyon is distributed over much of the floodplain which makes it difficult to identify and take effective actions on individual sources. Instead of trying to clean up all individual sources in Canyon Creek at this time, work would focus on reducing the metals load entering the South Fork from Canyon Creek. The work would also be expected to reduce particulate lead loading during periods of high stream flow. The proposed interim actions are:

- ❑ Collect and treat surface water and groundwater near the mouth of Canyon Creek. Initially, demonstration and pilot projects will be used to determine a specific

treatment option; and

- ❑ Stabilize stream banks and dumps (e.g. Tamarack, Omaha, Standard-Mammoth Loading Area, Hercules No. 5), as needed to prevent erosion.

Pine Creek

The Bureau of Land Management has been doing cleanup work in Pine Creek for many years. The creek is capable of supporting a limited fish population but it does not meet the federal and state water quality standards. The proposed actions would build on the work already completed and would improve conditions to allow natural increases in trout populations and address mining impacts to encourage spawning and rearing in this area. Overall, these actions would help protect the health of fish and wildlife populations present in Pine Creek. The proposed interim actions are:

- ❑ Stabilize and revegetate banks and beds to address impacts from historical mining activity; and
- ❑ Remove hot spots with high levels of soil contamination (includes Upper and Lower Constitution Mine and Mill, Highland Surprise Mine and Mill, Nevada Stewart Mine, Hilarity Mine and Mill, and Little Pittsburg and Sidney on Denver Creek).

South Fork

The proposed actions for the South Fork focus on reducing potential erosion of contaminated sediments and improving stream conditions to achieve larger fish populations. The proposed interim actions are:

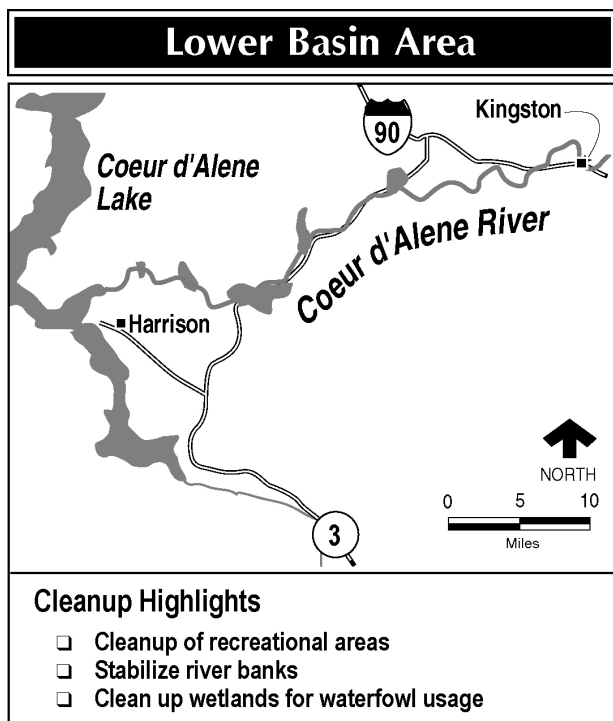
- ❑ Stabilize and revegetate stream channel and banks to address impacts from historical mining activity; and
- ❑ Conduct hot-spot removals of contaminated soil in the upper floodplain.

The South Fork includes the Bunker Hill Mining Complex, which is known as the "Bunker Hill Box." Ongoing or proposed actions in the Box are not included in this plan. However, it is recognized that the success of the Basin-wide cleanup depends on additional actions in the Box to reduce metal loading in surface and

groundwater. In addition to the interim action in the Basin, EPA plans to conduct appropriate remedial actions within the Box to significantly reduce metals entering surface water.

Proposed Cleanup Actions for the Lower Basin Recreational Areas

Recreational areas along the Coeur d'Alene River are targeted for action to prevent human exposure to metals in the soils at these areas (see the Proposed Plan for a complete list of these areas). Actions could include removing or capping contaminated soils, access controls, and education.



River Banks and Beds

The river banks and beds in the lower Coeur d'Alene River have high concentrations of metals deposited from upstream sources of historical mining contamination. The river bank material is unstable and slumps into the river because of bank erosion, boat wakes and seepage during summer and fall low water periods. Riverbed sediments are transported downstream, especially during late winter and spring high flow events. The cleanup actions proposed for this portion of the river focus on reducing the lead in sediments entering surface water and reducing soil toxicity for protection of birds, animals, and plants.

The following interim actions are proposed:

- ☐ Remove and dispose of contaminated bank sediments along approximately 33 miles of the most actively eroding river banks;
- ☐ Stabilize bank removal areas and revegetate to protect people, plants, and animals;
- ☐ Construct and operate sediment traps at four floodplain areas where large volumes of river sediments accumulate. Cleanup work will initially start with a pilot study; and
- ☐ Conduct periodic removal of up to 1.3 million cubic yards of riverbed sediments in the Dudley reach, or other areas where sediments naturally accumulate, to reduce the potential for downstream movement of contamination.

Wetlands and Lateral Lakes

Wetlands and lateral lakes along the lower river have high concentrations of metals in soils and sediments. In many areas the concentrations of lead are toxic to waterfowl. The proposed cleanup actions focus on reducing the metal concentrations in sediments. The result should lower the impacts to waterfowl and improve the fisheries in the lakes and wetlands. The following interim actions are proposed:

- ☐ Provide clean feeding areas for waterfowl using a combination of removals, capping, and soil amendments in approximately 3,000 acres. Priority areas for actions would have high waterfowl use, high lead levels, good road access, and relatively low recontamination potential. These areas would include Medicine Lake, Cave Lake, Bare Marsh, Thompson Lake, Thompson Marsh, Anderson Lake, and a portion of Lane Marsh; and
- ☐ Work with interested landowners to clean up and provide approximately 1,500 acres of agricultural land as additional clean waterfowl feeding areas.

Proposed Actions for Coeur d'Alene Lake

State, tribal, federal, and local governments are in the process of implementing a Lake Management Plan outside of the Superfund process. The primary goal of the plan is to reduce the likelihood of metals being released from the sediments at the lake bottom. Consequently, EPA is not including additional Superfund actions for Coeur d'Alene Lake in the interim action. A remedial decision for the Lake under Superfund is being deferred until actions by others are fully in place and have been evaluated.

Once the parties agree that the Lake Management Plan is being implemented and is providing adequate environmental protection, EPA could then proceed with CERCLA decision-making and with the process for removing the Superfund designation from the Lake. Deletion of areas from the Superfund list requires concurrence from the state and tribal governments with jurisdiction.

Managing Waste Material Generated by Cleanup Activities

Cleanup in the Basin will require construction of one or more permanent repositories for disposal of metals-contaminated soils, sediments, and source materials. The governments will work with the communities to identify suitable repository sites. The specific criteria for siting potential repositories will be developed with community input after the cleanup decisions are made in the Record of Decision. Additional material will not be brought from other areas and disposed of in the lateral lakes. However, contaminated material already in a lake or wetland may be consolidated into smaller areas and capped with clean sediments to isolate the contaminated sediments from the environment. Coeur d'Alene Lake will not be used as a repository.

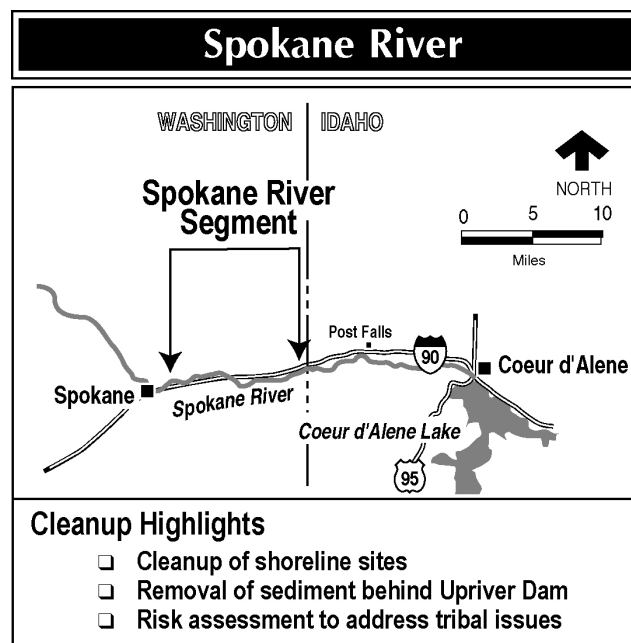
Proposed Cleanup Actions for the Spokane River

Focused cleanup will be conducted at selected depositional areas between the Idaho state line and Upriver Dam.

The following cleanup actions are proposed for protecting both human health and the environment:

- ☐ Conduct capping of contaminated sediments or sediment removals at ten shoreline sites between the state line and Upriver Dam*;
- ☐ Remove contaminated sediments stored behind Upriver Dam; and
- ☐ Conduct a Human Health Risk Assessment of the Spokane Reservation that addresses specific concerns of the tribe.

* See the proposed Plan for Specific Sites



Community Input and How it Has Been Addressed

The investigation and cleanup of mine waste contamination in the Basin has been a controversial and sometimes highly contentious issue. Citizens throughout the Basin have been very actively involved throughout the RI/FS process and have made their concerns known and provided input in a variety of forums.

Citizen Groups that Provided Input During the RI/FS

Citizens Advisory Committee RI/FS Task Force, Washington Citizens Advisory Committee, Coeur d'Alene Basin Stakeholders Consensus Process, Shoshone Natural Resources Coalition, Community Leaders for EPA Accountability Now, Citizens Against Rails to Trails.

Some of the Ways Citizens Were Involved in the RI/FS Process

Written comments on the draft Human Health and Ecological Risk Assessments, the draft Remedial Investigation, and draft Feasibility Study
Public Meetings
Workshops
Coeur d'Alene Basin Stakeholders Consensus Process*
Citizen Group Meetings
Individual Group Meetings with EPA Region 10 Managers and Staff
Weekly Teleconferences Open to the Public

*The actions described in the Proposed Plan closely parallel this group's general "common ground" remedial solution for tailings, banks and beds of the Coeur d'Alene River, lower River floodplains and lead in communities, as described in its [Report of the Outcome](#).

Economic Impacts

People are concerned about the public perception of areas where they live, work and recreate and that Superfund designation could negatively affect local economies.

EPA recognizes these concerns and believes that a healthy economy is necessary to ensure the long-term success of cleanup efforts. Here are some of the ways EPA is trying to address these concerns:

- ❑ EPA expects to quickly complete cleanup in the Upper Basin communities and begin the process of removing the Superfund designation from selected areas as soon as possible following cleanup;
- ❑ EPA recently provided \$100,000 for economic redevelopment efforts in Shoshone County;
- ❑ Local hiring will remain a top priority during the Basin cleanup as it has been during cleanup of the Bunker Hill Box.
- ❑ Under separate legal authorities outside of Superfund, the State of Idaho, Coeur d'Alene Tribe and other governmental agencies are taking the lead on implementation of the Lake Management Plan. EPA is planning on taking the steps necessary to delete Coeur d'Alene Lake from the National Priorities (Superfund) List once this plan is implemented and has been evaluated; and
- ❑ As requested, EPA sampled the beaches around Coeur d'Alene Lake in 1998 and determined them to be safe for recreational use, except for Harrison Beach. EPA worked with local business organizations to publicize that the beaches were safe for use.

Human Health Issues

EPA agrees with the State of Idaho's Human Health Risk Assessment and is prepared to move forward with the human health related cleanup actions described in the Proposed Plan. The Risk Assessment was conducted according to national guidelines and was extensively peer reviewed by leading national work groups.

During evaluation of potential cleanup actions, EPA continued to receive public input on the risk assessment and how to manage risks to people. Some of the input included the following:

- ❑ People expressed concern that the Human Health Risk Assessment overestimates the risks associated with mine waste contamination. Specifically, people questioned the science used (e.g., the IEUBK model) and the bioavailability of the metals in the Basin. In response to a request from a citizen group in the Upper Basin, EPA supported a "Science Summit" to bring together national and local experts to discuss the specific concerns in detail including the IEUBK model and bioavailability. The State of Idaho (which conducted the major portion of the Human Health Risk Assessment) wrote a detailed response to the issues raised at the Science Summit, and the State of Idaho Governor's Advisory Council on Human Health Risk Assessment met with members of the group to discuss their concerns.
- ❑ Concern was expressed about the method for drawing children's blood for blood-lead screening. In response to this concern, the method was changed from the venous method to the finger-stick method.
- ❑ Concern was expressed about the possibility of residential relocation in the Basin. EPA, the state and local agencies met with the affected residents in Burke Canyon and based on their input, relocation is no longer being considered as an area-wide option for Burke Canyon. However, relocation could still be considered on a case-by-case basis.

State and Local Control

People have expressed a preference for state and local entities to have a lead role in developing and implementing the cleanup plan. EPA agrees that state and local involvement has been and will continue to be vital to successful cleanup in the Basin. As noted above, state and local governments have been and will continue to be actively involved. For example:

- ❑ The State of Idaho conducted the Human Health Risk Assessment for the Basin;

- ❑ The State of Idaho is working with other government agencies, including the State of Washington, Coeur d'Alene Tribe, local counties, and EPA with the intention of forming a commission to oversee the implementation of the Record of Decision;
- ❑ The counties and cities in both the Upper and Lower Basin have received funding from EPA to facilitate their involvement;
- ❑ The Lake Management Plan will be implemented under state, tribal and local authorities outside of Superfund; and
- ❑ Implementation of institutional controls will be done at a local level.

The Path Forward Collaboration Continues

Following the comment period on the Proposed Plan, EPA will consider all comments and plans to issue the Record of Decision in early 2002. The selected remedy may change based on new information or public comments. Therefore, the public is encouraged to review and comment on all the alternatives and the cleanup projections presented in the Proposed Plan. The ROD will also include a Responsivness Summary which contains the responses to the comments received during the Proposed Plan public comment period.

Once the ROD is issued, design and implementation of cleanup actions will begin. The collaborative process among the agencies, tribes, local governments and community members will be critical during this next phase. After the ROD is issued, EPA will update the Basin Community Involvement Plan to include opportunities for involvement during the cleanup phase of work.

Proposed Plan Comment Form

Name

Address

Telephone

Comment

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Mail to: Sheila Eckman, Coeur d'Alene Team Leader
U.S. Environmental Protection Agency
1200 6th Avenue, MS ECL-113
Seattle, WA 98101
Telephone: 206-553-0455 or 1-800-424-4372
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**Thank you for
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